# HOUSTONIA LONGIFOLIA (RUBIACEAE): NEWLY DOCUMENTED FOR THE FLORA OF TEXAS

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## ABSTRACT

Houstonia longifolia Gaertn. (Rubiaceae) is reported as new to Texas.

#### RESUMEN

Houstonia longifolia Gaertn. (Rubiaceae) se cita como nueva de Texas.

Houstonia longifolia Gaertn. var. tenuifolia (Nutt.) A. Wood was included in the checklist of the vascular plants of Texas by Jones et al. (1997). Its inclusion appears based upon the citation by Hatch et al. (1990) of Hedyotis nuttalliana Fosberg as occurring in the Pineywoods, Gulf Prairies and Marshes, Cross Timbers and Prairies, and Edwards Plateau vegetational areas of the state. In a monograph of the genus, Terrell (1996) treats both Houstonia longifolia var. tenuifolia (Nutt.) A. Wood and Hedyotis nuttalliana as synonyms of Houstonia longifolia. He further comments (p. 67) that Houstonia longifolia is "quite variable and wide ranging, and by far the most difficult species in the genus." Ultimately he concludes that the only reasonable taxonomic solution is not to recognize varieties or subspecies. Instead, Terrell recognizes "population groups." The "Ozark-Ouachita Group" of Houstonia longifolia is known from southeast Oklahoma and southwest Arkansas, barely 20 km north of Texas. The "Tenuifolia Group" (formerly H. longifolia var. tenuifolia) is restricted, according to Terrell, to west Florida and central Alabama northeastward to Virginia and West Virginia.

The plant referred to by Jones et al. (1997) and Hatch et al. (1990) is, under Terrell's (1996) classification, *Houstonia longifolia*, however, this species has not previously been found in Texas (Terrell 1996). At this time the identity of the plant or plants referred to by Hatch et al. (1990) and Jones et al. (1997) is not clear, but is most likely *Stenaria nigricans* (Lam.) Terrell var. *nigricans* a species widely distributed in Texas. The collection is the first validation of *Houstonia longifolia* from Texas.

Specimens cited: **TEXAS. Red River Co.:** W side of Tanyard Creek, 0.6 mi NE of Woodland Cemetery, 1.2 mi NE of Woodland at jct. of Hwy 195 and Hwy 410, 19 May 1999, *Singhurst 7902* (BAYLU, TEX, US).

The specimens were collected from a thinly wooded hardwood forest dominated

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by *Quercus alba* L., *Q. shumardii* Buckl., *Q. muhlenbergii* Englem. (Fagaceae), *Carya tomentosa* (Poir.) Nutt. (Juglandaceae), and a few scattered trees of *Acer saccharinum* L. (Aceraceae). The site is characterized by an 8–20% slope with a sparceness of vegetation. Isolated clumps of *Houstonia longifolia* were growing on a steep bluff overhang above Tanyard Creek and among sandstone outcrops on the slope.

Houstonia longifolia is a perennial, sometimes with a basal rosette during flowering, and a height of up to 45 cm. Other than *H. purpurea*, all east Texas *Houstonia* species are annual, lack basal rosettes at flowering, and are of considerably shorter height (up to 15 cm, but generally less than 10 cm). *Houstonia purpurea*, known in Texas only from Newton Co. (Terrell 1996), while similar to *H. longifolia*, is distinguished by it broader median cauline leaves. A similar species is *Houstonia ouachitana* (E.B.Smith) Terrell of southwest Arkansas and southeast Oklahoma. That species is distinguished by the densely pilose hairs on the inner surfaces of the corolla. These hairs are 0.5–1.2(–1.8) mm, while the inner corolla surfaces of *Houstonia longifolia* are glabrous or with hairs less than 0.5 mm long (Terrell 1996).

### ACKNOWLEDGMENTS

We are indebted to Tom Wendt (TEX-LL) for some assistance and information and to Edward E. Terrell (MARY) for confirmation of our determination. Also, a special thanks to Mrs. Betty Jo Swindle for access to her Red River County property. John Pruski (US) read and commented on preliminary drafts of the manuscript.

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